Carbon Reduction Plan

Supplier name: Cory Group

Publication date: April 2024

Cory is committed to achieving net zero emissions by 2040.

Baseline Emissions Footprint

Baseline Year: 2022

Additional Details relating to the Baseline Emissions calculations.

We updated our baseline year to 2022 for our 2023 reporting cycle, due to the acquisition of a new Waste Transfer Station and the inclusion of the emissions from its operation into our carbon accounting.

Our reporting methodology is in accordance with UK Government Environmental Reporting Guidelines and the GHG Protocol Corporate Accounting and Reporting Standard. GHG emission factors are taken from the 2022 and 2023 UK Government's conversion factors for GHG reporting, our electricity tariff's conversion factor and AIB's European Residual Mix 2021. The CO_2 emissions from Riverside 1 EfW facility (99 per cent of our Scope 1 and Scope 2 emissions), are measured using a Continuous Emissions Monitoring System.

As per the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, the carbon emissions from our EfW facility are separated into fossil and biogenic origin, and only the fossil CO_2 is included in this Carbon Reduction Plan as Scope 1 emissions. However, Cory's commitment to reach net zero by 2040 also includes the biogenic emissions from our EfW process and we report these emissions in our Streamlined and Energy Carbon Reporting which is published in our Annual Report. The biogenic emissions from our EfW process were 401,840 tCO_2e in 2022 and 425,972tCO_2e in 2023.

Baseline year emissions:

EMISSIONS	TOTAL (tCO_2e)
Scope 1	433,274
Scope 2	1,663
Scope 3 (Included Sources)	

Scope 3 category	Activity	Emissions source	Tonnes CO2e
Upstream transportation and distribution	Waste collection	Customer fleet energy use (waste collections)	8,697

	Waste generated in operations	By-products from EfW process	Incinerator Bottom Ash, Air Pollution Control Residue sent for reprocessing and Air Pollution Control Residue sent to long-term storage	3,372
	Business travel		Company car and personal car use for business travel	24
	Employee commuting			We do not have this information available
	Downstream transportation and distribution			As Cory do not operate the substation that transfers the electricity we generate to the UK national grid, this category is not applicable to our operations.
Total Emissions	Total Scope 1 and Scope 2 emissions: 434,937 Total Scope 1, Scope 2 and Scope 3 emissions as outlined above: 447,030			

Current Emissions Reporting

Reporting Year: 2023				
EMISSIONS	**TOTAL (tCO_2e)**			
Scope 1	**435,535**			
Scope 2	**2,869**			
Scope 3 **(Included Sources)**	**Scope 3 category**	**Activity**	**Emissions source**	**Tonnes CO2e**
	Upstream transportation and distribution	Waste collection	Customer fleet energy use (waste collections)	7,854
	Waste generated in operations	By-products from EfW process	Incinerator Bottom Ash, Air Pollution Control Residue sent for reprocessing and Air Pollution Control Residue sent to long-term storage	3,524
	Business travel		Company car and personal car use for business travel	17

	Employee commuting			We do not have this information available
	Downstream transportation and distribution			As Cory do not operate the substation that transfers the electricity we generate to the UK national grid, this category is not applicable to our operations.
Total Emissions	Total Scope 1 and Scope 2 emissions: 438,403 Total Scope 1, Scope 2 and Scope 3 emissions as outlined above: 449,798			

Emissions reduction targets

99 per cent of our Scope 1 and Scope 2 emissions relate to the combustion of our customers' residual non-recyclable waste in our Energy from Waste (EfW) facility. EfW remains the lowest carbon method to process waste, saving 305kg per tonne of waste compared to disposal in landfill.[1]

Achieving net zero is dependent upon Cory installing carbon capture and storage (CCS) technology at our EfW facility, Riverside 1, and future EfW facility, Riverside 2, which will become operational in 2026. In March 2024 we submitted a Development Consent Order application seeking permission to build and operate a CCS project at both of our EfW facilities, to the UK Secretary of State for Energy Security and Net Zero. The project aims to capture 95% of the fossil and biogenic CO_2 emissions from the facilities - approximately 1.4mtCO_2 per annum - making it one of the largest single-site carbon capture projects in the UK.

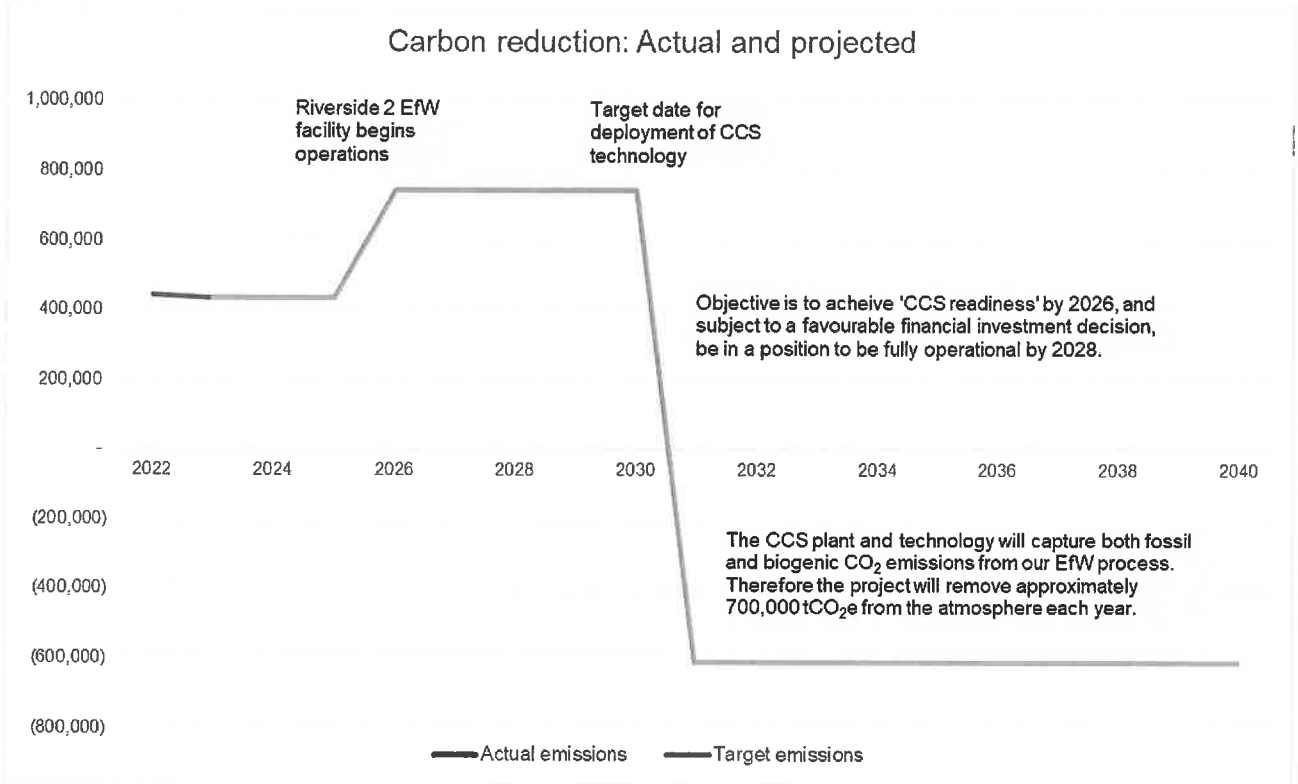
Our objective is to achieve 'CCUS readiness' (consents in place, front-end engineering, and design (FEED) completed, T&S provider identified) by 2026, and, subject to a favourable financial investment decision, be in a position to be fully operational by 2031. Once the CCS plant is operational our EfW operations will become 'carbon negative', i.e. removing more CO_2 from the atmosphere than is emitted due to the composition of waste (c. 50% fossil carbon and 50% biogenic). There is further information about our project available on our dedicated consultation website - https://corydecarbonisation.co.uk/.

We have made the following commitments to progress our journey to net zero in our operational emissions (which comprises all activities outside of our EfW process – approximately 1% of emissions) to be delivered before 2030:

- Maximise energy efficiency across all sites and activities.
- Invest in no new diesel heavy plant from 2030 and achieve total phase-out of all diesel-fuelled plant and site vehicles by 2040.
- Halve zero emissions dock tractors operating at our site in Belvedere by 2030.
- Phase out natural gas from all sites by 2030.
- Use low carbon fuels in our river fleet while undertaking research and development into zero emissions marine vessels.

[1] See the calculations behind this figure in Cory's 2023 Annual Report available on our website: https://www.corygroup.co.uk/

Anticipated performance against these targets can be seen in the graph below:



Carbon Reduction Projects

The following environmental management measures and projects have been completed or implemented since the 2022 baseline. The carbon emission reduction achieved by these schemes equate to 3,291tCO_2e, a 1% reduction against the counterfactual, which would be using marine gas oil and gas oil in our river operations and Waste Transfer Stations instead of renewable diesel.

- We have been using renewable diesel, also known as hydrotreated vegetable oil (HVO), in our Lighterage Operations since June 2021 and across some of our Waste Transfer Stations since 2022. During 2023 our Smugglers Way (Western Riverside), Cringle Dock and Northumberland Wharf Waste Transfer Stations (WTS) used renewable diesel for the entire year. Between Lighterage and the WTS we reduced our CO_2 emissions from fuel use from 3,340 to 49. We expect this reduction to remain at approximately the same level each year.
- During 2021 a programme was initiated in our Lighterage Operations to operate the fleet at a maximum of 75 per cent engine power when underway and when it is safe to do so. During 2023, our river operations saved 120,000 litres of fuel, when compared to 2020 performance, because of these energy efficiency measures.
- In early 2023 we completed the installation of 6 electric vehicle chargepoints at our new site in Barking, bringing our total to 43 chargepoints across 7 sites. During 2023 we saved 48 tonnes CO2 over 2,908 charging sessions by our employees.

- During 2023 we upgraded the desiccant dryers for the instrument air system at Riverside 1 to a more efficient vacuum pump type dryer. The next phase of the project is to upgrade the compressed air system controller which will provide trends and reports on the total air and electricity consumption of the system and its components. This will allow us to monitor and report on future energy savings achieved.
- All Cory's Waste Transfer Station (WTS) Site Managers are sent their energy use intensity ratio quarterly. The intensity ratios are the calculation of energy used, electricity, fuel, and gas (if applicable), to process one tonne of waste at a specific site. Through this process we can see that the energy use ratios have reduced year on year across some of our sites, this is due to improvements in our processes and equipment upgrades; for example, during 2023 we upgraded six optical sorters in our Materials Recycling Facility to improve the capture rate and efficiency and progressed our LED lighting programme across all sites.
- During 2023, we continued to engage with the manufacturer of the dock tractors operating at Riverside 1 on the opportunity to electrify our fleet. We successfully trialled an electric unit in 2022 and now await the development of a hydraulic wet pack that would enable containers to be tipped from the vehicle. We purchased two additional internal combustion engine units in 2023 which are modular, which means the power pack can be upgraded to an electric engine in the future.

Declaration and Sign-Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard[2] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting[3].

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard[4].

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

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Dougie Sutherland

Chief Executive

Date: 30 APR 2024

[2] https://ghgprotocol.org/corporate-standard
[3] https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting
[4] https://ghgprotocol.org/standards/scope-3-standard